

IN THE CLAIMS – VERSION WITH MARKINGS TO SHOW CHANGES MADE

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14. (Amended) An apparatus for capturing [target insect species comprising] stinkbugs consisting essentially of:

a bottom portion for attracting the target insect species and for directing said target insect species toward and into a top portion for the capture thereof;

said bottom portion comprising at least a first and a second fin, said first fin being disposed in a first substantially vertical plane and said second substantially vertical plane, said first and second fins extending radially outwardly from a common longitudinal axis defined by a line of intersection of said first and second substantially vertical planes;

a surface of said first fin and a surface of said second fin defining opposing channel surfaces of an outwardly facing channel, said channel surfaces having portions which are directly exposed to an environment in which said target species is present, whereby said directly exposed portions may be seen by members of said [target] stink bugs from positions beyond a perimeter of said apparatus;

each of said first and second fins being wider at a base portion thereof and narrow at a top portion thereof, whereby said channel defined by said surfaces of said first and second fins narrows from said wider base portions to said narrower top portions; said bottom portion being predominantly of a color which reflects light having a wavelength which attracts said stink bugs [the target insect species];

said portion of said apparatus comprising a receptacle, said receptacle being open only at an entrance opening, and wherein said entrance opening is sufficiently large to permit entry of said stink bugs into said receptacle and is positioned at, and substantially surrounds,

an upper part of said bottom portion, whereby said channel formed by said first and said second fins terminates within said receptable[.];

said top portion comprising a material of construction which admits ambient exterior light into the interior of said chamber and onto said chained surface of said at least one channel.

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12. (Amended) The apparatus of [11] 13, wherein said material of construction of said top portion is screening which is impervious to the passage therethrough of said stink bugs [the target insect species].

REMARKS

The claims have been amended in order to more completely describe and distinctly claim the invention and to overcome the ground of rejection set forth in the Official Letter.

Thus, the apparatus has been described as being of a design and structure for capturing stinkbugs. In addition, the opening into the top portion of the trap has been defined as being sufficiently large to permit entry into the upper portion thereof of stinkbugs. Finally, in response to the Examiner's remark at page 4 regarding claim 12, this claim has been amended to recite that it is the top portion of the trap that is constructed of screening. Inasmuch as no new matter is embodied by the proposed amendments, entry thereof is respectfully requested.

The rejection of the claims over 35 USC 103 as obviously unpatentable over Tedders is respectfully traversed insofar as this ground of rejection is directed to the claims as presently amended.

The issue underlying this ground of rejection is whether one skilled in the art would reasonably be led to modify the structure of the Tedders trap (which is designed for the attraction and trapping of Pecan Weevils) to that which is presently claimed for the express purpose of attracting and trapping stinkbugs. For the following reasons, it is respectfully submitted that the only reasonable answer to this question is in the negative.

First, stinkbugs and pecan weevils are not related insect species; the latter being *Cleopter: Curculionidae* whereas stinkbugs are *Hemiptera: Pentatomadidae and Coreidae*. The Examiner does not address this issue in his remarks. There is no evidence or prior art of record that equates these two entirely different species of insect in any aspect, whether it be size, mating habits, feeding habits or any behavior. Since the Examiner admits

that there are structural differences between the trap disclosed by Tedders and that claimed herein the Examiner must support the stated ground of rejection with prior art or some evidence that would lead one skilled in the art to the conclusion that these modifications would lead to the attraction and trapping of stinkbugs. Nor can the Examiner argue that these modifications do not change the function of the Tedders trap. It will be demonstrated below that these “modifications” render the Tedders trap inoperable for its intended purpose, i.e., the attraction and trapping of pecan weevils.

Where is the teaching, other than the applicant’s own disclosure, that stinkbugs are attracted to a certain type of structure and tend to crawl upward therein, thereby rendering them susceptible to attraction and capture as they are by the claimed device. Lacking this critical prior art teaching the Examiner’s case for obviousness necessarily fails.

It is well settled that the prior art must suggest the problem sought to be solved by a claimed invention before it can be said to suggest or disclose its solution. See *In re Shaffer*, 108 USPQ 326; *In re Aufhauser*, 158 USPQ 351; *Graham v. John Deere*, 148 USPQ 459; *US v. Adams* 148 USPQ 479 and *In re Nomiya*, 184 USPQ 607. Tedders does not mention stinkbugs; indeed the reference is exclusively limited to the unique problem of pecan weevils. The reference goes to great pains to identify the habits and peculiarities of only pecan weevils for the purpose of designing a trap suitable only for attracting and capturing pecan weevils. The Examiner has cited no evidence or prior art that would lead one skilled in the art to modify the Tedders trap so as to render it operable to attract and capture an entirely different species of insect, namely, the stinkbug.

Indeed, in some three areas where no prior art is cited to show an element of the claim, the Examiner resorts to the dangerous position of “taking Official Notice” that the element is “old and well known” (see Page 3, line 6, page 4, line 4 and page 4, line 7). It is painfully obvious that the Examiner has combined a hindsight reconstruction of the invention

from the applicant's own disclosure with this "taking of Official Notice" of elements missing from the prior art to reject the claims over Tedders. In order to justify a rejection based upon a reference, it is necessary that the reference should contain something to suggest the modifications required to arrive at the claimed invention. *Ex parte Walker*, 135 USPQ 195; *Ex parte Fleischmann*, 157 USPQ 155. The prior art reference cannot be viewed as if appellant's invention was included therein as a part of the knowledge possessed by one of ordinary skill in the art. The prior art reference itself must suggest the combination of elements necessary to render the claimed invention obvious to one skilled in the art; and resort must not be had to applicant's own disclosure and the utilization of hindsight for the guiding hand that dictates the rejection.

Turning to the above noted distinction between the target species of the respective traps, there is nothing in the prior art that would suggest to one skilled in the art that a trap that is constructed to lure and capture pecan weevils would also do the same for stinkbugs, an entirely different species of insect. Accordingly, it is apparent that the reference does not discuss or even remotely suggest the problem sought by the claimed invention.

A second distinction between the Tedders trap and that of the claims is that related to color. Whereas the Tedders trap is shaped and colored so as to lure pecan weevils, the present trap is designed to attract stinkbugs. Tedders unequivocally states that pecan weevils are attracted by "dark colored" substrates and "poorly reflective surfaces" (see Page 19, 2d paragraph) Indeed, in the last sentence of this paragraph it is stated:

---It is this hypothesis that is the basis of the design of this weevil trap---

Thus, by Tedder's own clear admission, the prior art trap depends for success upon maintaining a dark and non-reflective environment on and within the trap in order to lure the desired target pecan weevil. Note also the tests reported in the "Materials and Methods" portion of the reference (page 19) wherein comparative tests were conducted between dark

and white, i.e., reflective traps. In the “Results and Discussions” section, it is clearly stated that the dark, non-reflective traps were vastly superior to the reflective, bright traps.

It is in this area that the Examiner seriously mischaracterizes the teachings of the reference to the detriment of the validity of this ground of rejection. At page 3, lines 23-24, the Examiner states that Tedders teaches “white colored bases” for the disclosed trap. Actually, what Tedders does disclose in this context is painting the trees that pecan weevils normally gravitate toward white so that the weevils will be repelled therefrom and attracted to the dark, non-reflective Tedders traps located nearby. Thus, Tedders, rather than suggesting the claimed device, actually teaches away from it by dictating that the trap should be dark colored and offer a dark, non-reflective harbor the target pecan weevils.

Note also that Tedders specifies a “plastic” top. It is submitted that, to those skilled in the art, the term, “plastic”, connotes a top that is at least opaque, if not colored so as to admit little or no light. This is in keeping with Tedders desire to maintain a dark, non-reflective interior that will attract weevils.

The claims, however, specify a light colored and bright, light filled trap to attract the stinkbug species. It is clear therefore, that, rather than disclosing or suggesting the claimed invention, the reference actually teaches away from the invention.

A legal conclusion of patent invalidity for obviousness must be supported by findings on the four factual inquiries set forth in *Graham v. John Deere Co.*, [383 U.S. 1, 148 USPQ 459 (1966)]. Precedent clearly establishes that an Examiner must make Graham findings before rejecting a claim for obviousness. See *Jones v. Hardy*, 727 F.2d 1524, 1529, 220 USPQ 1021,1025 (Fed. Cir. 1984)); *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 961, 1 USPQ2d 1196, 1200 (Fed. Cir. 1986) ; In *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 228 USPQ 90 (Fed. Cir. 1985), it was stated:

“---In patent cases, the need for express Graham findings takes on an especially significant role because of an occasional

tendency --- to depart from the Graham test, and from the statutory standard of unobviousness that it helps determine, to the tempting but forbidden zone of hindsight. Thus, we must be convinced --- that---Graham (was actually applied)---” The necessity of Graham findings is especially important where the invention is less technologically complex, [In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999)]. In such a case, the danger increases that the very ease with which the invention can be understood may prompt one to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.---”

In order to prevent a hindsight-based obviousness, analysis, the relevant inquiry for determining the scope and content of the prior art is whether there is a reason, suggestion, or motivation in the prior art or elsewhere that would have led one of ordinary skill in the art to arrive at the claimed invention from the applied prior art. See, e.g., *In re Rouffet*, 149 F3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir., 1998) (“[T]he Board must identify specifically the reasons one of ordinary skill in the art, would have been motivated to select the (teachings) and to combine them to render the claimed invention obvious.”); *In re Dembiczak*, 175 F3d at 90, 50 USPQ2d at 1617 (“Our case law makes clear that the best, defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art teachings.”). Determining whether there is a suggestion or motivation to modify a prior art reference is one aspect of determining the scope and content of the prior art, a fact question subsidiary to the ultimate conclusion of obviousness. *Sibia Neurosciences, Inc. v. Cadus Phanna. Corp.*, 225 EM 1349, 1356, 55 USPQ2d 1927, 1931 (Fed. Cir. 2000); *Tec Air Inc. V. Denso Mfg., Inc.*, 192 F.3d. 1353, 1359, 52 USPQ2d 1294, 1298 (Fed. Cir. 1999) (stating that the factual underpinnings of obviousness include whether a reference provides a motivation to combine its teachings).

The determination of the level of ordinary skill in the art is also an integral part of the Graham analysis. See *Custom Accessories*, 807 F.2d. at 962, 1 USPQ2d at 1201 (“Without [a

determination of the level of ordinary skill in the art], a district court (i.e., Examiner) cannot properly assess obviousness because the critical question is whether a claimed invention would have been obvious at the time it was made to one with ordinary skill in the art.”). Factors that may be considered in determining the ordinary level of skill in the art include: 1) the types of problems encountered in the art; 2) the prior art solutions to those problems; 3) the rapidity with which innovations are made; 4) the sophistication of the technology; and 5) the educational level of active workers in the field. See *id.* at 962, 1 USPQ2d at 1261 (citing *Envtl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 697, 218 USPQ 865, 868-69 (Fed. Cir. 1983)). The Examiner has presented no evidence as to this “integral part” of the Graham analysis required to validate obviousness.

The Examiner also erred in failing to consider, or at least to discuss, evidence of secondary considerations. The authorities clearly hold that secondary considerations, when present, must be considered in determining obviousness. See, e.g., *Loctite*, 781 F.2d at 873, 228 USPQ at 98 (“[S]econdary considerations---, when present, must be considered---”, citing *Simmons Fastener Corp. v. Ill. Tool Works, Inc.*, 739 F.2d 1573, 1575, 222 USPQ 744, 746 (Fed. Cir. 1984). “Only after all evidence of nonobviousness has been considered can a conclusion on obviousness be reached---”, citing *Ashland Oil, Inc. v. Delta Resin & Refractories, Inc.*, 776 F.2d 281, 306, 227 USPQ 657, 662 (Fed. Cir. 1985)). Indeed, in *Stratoflex*, 713 F.2d at 1538, 218 USPQ at 879, the CAFC said:

“---Evidence of secondary considerations may often be the most probative and cogent evidence in the record. It may often establish that an invention, appearing to have been obvious in light of the prior art was not. It is to be considered as part of all the evidence, not just when the decision maker remains in doubt after reviewing the art---”

"Proceeding contrary to the accepted wisdom ... is 'strong evidence of unobviousness.' " *In re Hedges*, 783 F.2d 1038, 1041, 228 USPQ 685, 687 (Fed. Cir. 1986) (citing *WL Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1552, 220 USPQ 303, 312 (Fed. Cir. 1983)). In the present case, the inventor proceeded "contrary to the wisdom" of the reference by employing materials of construction that were light and reflective rather than dark and non-reflective in order to arrive at a result completely different from that of the reference.

Thus, the legal conclusion of invalidity for obviousness depends on the four factual inquiries identified by *Graham v. John Deere Co.* as concerning (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) secondary considerations of nonobviousness.

In the present case the Examiner has erred by failing to conduct a *Graham* analysis. Indeed the Examiner has failed to even mention *Graham*, much less analyze the disclosures of the prior art. The necessity of *Graham* is especially important where, as in this case, the invention is less technologically complex. In such a case, the danger increases that "the very ease with which the invention can be understood may prompt one to 'fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher,'" *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999).

It is clear that the authorities are unanimous in holding that it is impermissible to use the claimed invention as an instruction manual or "template" to piece together isolated disclosures and teachings of the prior art so that the claimed invention may be rendered obvious. A rejection based on § 103 must rest on a factual basis, with the facts being interpreted without hindsight reconstruction of the invention from the prior art. In making this evaluation, the examiner has the initial duty of supplying the factual basis for the rejection he advances. He may not, because he doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the

factual basis. See *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968).

Although the Examiner has not made out a *prima facie* case of obviousness for the reasons set forth above, nevertheless, applicant submits herewith a Declaration Under 37 § CFR 1.132 that unequivocally establishes the unobvious and unexpected results associated with the claimed invention when compared with the disclosure of Tedders.

Since (1) there is no factual basis in the prior art relied on which supports the proposed rejection, and it is apparent that the examiner's conclusion of obviousness is based on hindsight reconstruction of the claimed invention from isolated disparate teachings in the prior art reference which is not concerned with the problem sought to be solved by the claimed invention and (2) applicant has submitted a showing of unobvious results associated with the claimed invention over Tedders, this ground of rejection is not sustainable.

Accordingly, withdrawal of this ground of rejection is respectfully requested.

Applicant has earnestly endeavored to place this application in condition for allowance and an early action to that end is respectfully requested.

Respectfully submitted,

MILES & STOCKBRIDGE

A handwritten signature in black ink, appearing to read 'D. Clarke', is written over the firm name.

Dennis P. Clarke
Registration No. 22,549

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1751 Pinnacle Drive
Suite 500
McLean, Virginia 22102-3833
Telephone: (703) 903-9000
Facsimile: (703) 610-8686